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# THE ROLE OF PROTEIN KINASES IN ALZHEIMER'S DISEASE

Andrea F. N. Rosenberger

The studies described in this thesis were carried out at the department of Pathology and the Alzheimer center, VU University Medical Center, Amsterdam, The Netherlands as well as PamGene International B.V., 's-Hertogenbosch, The Netherlands. The CSF study (Chapter 6) was conducted within the framework of the European EUROTRANS-BIO – ERA-NET project B4AD (Bayesian-statistics and Bioinformatics in Biomarker and Biobanks in Alzheimer's Disease), a collaborative project of the International Drug Development Institute (Louvain-la-Neuve, Belgium), PamGene International B.V. (Den Bosch, The Netherlands) and the VU University medical center and the Alzheimer center (Amsterdam, The Netherlands). The VUmc Alzheimer center is supported by Alzheimer Nederland and Stichting VUmc fonds. The author of this thesis was supported by Agentschap NL and Stichting ZABAWAS. Research of the VUmc Alzheimer center and the Department of Pathology is part of the neurodegeneration research program of the Neuroscience Campus Amsterdam.

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### **Neural Migration**

*Neural Migration depicts a period of brain development wherein radial glia (black cells) divide continuously to create new neurons (white cells). These new neurons climb the black dendritic stalks of their parent cells, eventually finding their final resting places within the layers of cerebral cortex. This process creates billions of new neurons and occurs over the period of only a few weeks during gestation.*

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